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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,806	09/29/2003	John J. McEllen	SLU.P.US0002	2213

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EXAMINER

CHIN, BRAD Y

ART UNIT PAPER NUMBER

1744

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,806

Applicant(s)

MCELLEN, JOHN J.

Examiner

Brad Y. Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/29/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: On page 6, line 32 and page 7, lines 6, 8, 15, and 17, Applicant interchanges use of reference numerals, 114 and 26, for representation of the UV light source. It is believed that Applicant should consistently use reference numeral 114. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Nelson et. al. [U.S. Patent Application Publication No., US 2003/0039577].

Regarding claim 1, Nelson teaches an air treatment unit comprising:

a module power socket (ballast (not shown) – power connector 19 provides current from a ballast (not shown) to radiation source 36 – See Specification, p. 4 [0041]; bulbs may be powered by a conventional AC ballast (for use in stationary areas) or a conventional DC ballast connected to a battery to enable the system to be portable and used in mobile environments – See Specification, p. 2 [0018]);

an air treatment duct having an interior defining air path (system 2 includes a generally cylindrical housing 5 extending from a base 3...an internal fan (not shown) for drawing air through the system (inlet and outlet streams of air) – See Specification, p. 3, [0040]); and

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a light module (UV radiation source 36), that selectively engages said air treatment duct (UV radiation source 36 disposed within air treatment duct system 2), said light module comprising;

a housing having a baffle, said baffle extending across said air path when said light module engages said air treatment duct (bulb holder 30 having a user grip 32; user grip 32 is placed on the system top surface, thereby preventing exposure to direct UV light – user grip extends across air path of system when affixed to the system top surface, facilitating engagement of the UV radiation source with the air treatment duct system – See Specification, p. 4 [0044]);

an integral ultraviolet light source (UV radiation source 36 bulbs) and light source socket (power connector 19), said ultraviolet light source being fixed to and extending through said baffle, such that said interior of said air treatment duct is exposed to ultraviolet light from said ultraviolet light source when said light module engages said air treatment duct and said ultraviolet light source is powered (placement of UV bulb into the system is facilitated by disposing bulb holder 30, containing UV bulb, back into system, via gripping portion 32, with bulb extending into (connecting with) power connector 19; bulb receptacle 21 enables UV light source to be fixed to and extend from the user grip and bulb holder, exposing UV radiation source to the interior of the air treatment duct system – See Specification, p. 4, [0044]); and

a connector (power connector 19) that selectively mates with said module power socket (ballast, as defined above), said connector being in power transmissive communication with said light source socket, wherein, when said light module selectively engages said air treatment duct and said connector selectively mates with said module power socket, said light module cannot be fully removed from its engagement with said air treatment duct (the bulb is enabled, i.e. power transmissive communication, when the

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bulb is disposed within power connector 19 and the gripping portion 32 is placed on the system top surface, thereby preventing exposure to direct UV light – See Specification, p. 4, [0044]).

Regarding claim 2, Nelson teaches the air treatment of claim 1, wherein said housing of said light module includes a connector flange having an aperture that aligns with said module power socket when said light module engages said air treatment duct (See Fig. 3; the UV radiation source and the power connector align with the ballast when the UV radiation source engages the air treatment duct system).

Regarding claim 3, Nelson teaches an air treatment unit of claim 1, wherein said ultraviolet light source provides UV energy corresponding to a wavelength of from about 100 to about 280 nanometers. Applicant states in Specification (p. 7) that the preferred source of ultraviolet light is a source of UV-C light. Applicant identifies preferable wavelengths of 253.7 nm and 185 nm. (See Specification, p. 2, [0018] – radiation sources may all be implemented by separate independent bulbs emitting radiation having wavelengths of approximately 185 or 254 nanometers; Energy from a UV-C light source corresponds to a wavelength of 100 to 280 nanometers).

Conclusion

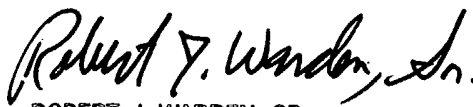
2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brad Y. Chin whose telephone number is 571-272-2071. The examiner can normally be reached on Monday – Friday, 8:00 A.M. – 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden, can be reached at 571-272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Byc
October 27, 2004


ROBERT J. WARDEN, SR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700